

CULTURAL RESOURCES SURVEY OF THE PATRICK PLACE TRACT, YORK COUNTY, SOUTH CAROLINA

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ABSTRACT

This report provides the results of a cultural resources investigation of a portion of a 60 acre tract situated in central York County, about 10 miles northeast of the city of York. The study was conducted by Dr. Michael Trinkley of Chicora Foundation for Mr. Tom Smith of May Green Properties and is intended to assist May Green Properties comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The tract, which extends from S-27 (Ridge Road) to Crowders Creek, is to be used for construction of single family dwellings. This portion of York County is being rapidly developed.

The proposed undertaking will require the clearing of the tract, followed by construction of various infrastructure elements, such as roads, stormwater drainage, and utilities. Individual lot construction will involve grading, additional utility construction, and subsequent building of structures. These activities have the potential to affect archaeological and historical sites and this survey was conducted to identify and assess archaeological and historical sites which may be in the project tract. For this study an area of potential effect (APE) 0.5 mile around the proposed tract was assumed.

Consultation with the S.C. Department of Archives and History revealed no previously identified NRHP sites within the 0.5 mile APE, but three historic resources were observed. Two of these resources, 102-1368.00 (Mount Harmony Church) and 102-1368.01 (Mount Harmony Church Cemetery), located during a York County comprehensive survey, are located within view of the project area, but had been determined not eligible for inclusion on the National Register of Historic Places (Kissane and Kissane 1992). The other structure 102-1367 is a ca. 1908 house which has also been determined not eligible for the National Register of Historic Places (Kissane and Kissane 1992).

An investigation of the archaeological site files at the S.C. Institute of Archaeology and Anthropology revealed no archaeological sites within the APE.

The archaeological study of the tract incorporated shovel testing at 100-foot intervals on transects which were placed at 100-foot intervals. All shovel test fill was screened through ¼-inch mesh and the shovel tests were backfilled at the completion of the study. A total of 81 shovel tests were excavated.

As a result of these investigations, no archaeological sites were identified. This is most likely due to the relatively steep terrain and alluvial soils in the surveyed area.

A survey of public roads within 0.5 mile of the survey area was conducted in an effort to identify any architectural sites over 50 years old which also retained their integrity. As previously mentioned, a comprehensive survey has been done for York County (Kissane and Kissane 1992), but no additional sites were found beyond the three resources already determined not eligible for inclusion on the National Register of Historic Places.

It is possible that archaeological remains may be encountered in the project area during construction. Construction crews should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office or to Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No construction should take place in the vicinity of these late discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

TABLE OF CONTENTS

List of Figures		iv
Introduction		1
Natural Environment		5
<i>Physiographic Province</i>	5	
<i>Geology and Soils</i>	5	
<i>Climate</i>	6	
<i>Floristics</i>	6	
Prehistoric and Historic Background		7
<i>Previous Research</i>	7	
<i>Prehistoric Overview</i>	7	
<i>Historic Overview</i>	13	
Research Methods and Findings		15
<i>Archaeological Field Methods and Findings</i>	15	
<i>Architectural Survey</i>	15	
<i>Site Evaluation and Findings</i>	17	
Conclusions		19
Sources Cited		21

LIST OF FIGURES

Figure

1.	Project vicinity in York County	2
2.	Project area with previously identified architectural sites	3
3.	View of Crowders Creek	5
4.	View of wetlands found in the project area	6
5.	Generalized cultural sequence for South Carolina	8
6.	Portion of Mills' <i>Atlas</i> showing the project vicinity	13
7.	Portion of the 1950 General Highway and Transportation Map	14
8.	Survey area with transects	16
9.	Mount Harmony Church	17

INTRODUCTION

This investigation was conducted by Dr. Michael Trinkley of Chicora Foundation, Inc. for Mr. Tom Smith of May Green Properties in Fort Mill, SC. The work was conducted to assist May Green Properties comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The project area consists of the northern third of the 60 acre tract proposed to be used for the construction of a neighborhood of single family dwellings located northeast of the city of York (Figure 1). The survey area is irregular in shape with the northern portion bordering Crowders Creek and the southern portion bordering S-27 (Ridge Road) (Figure 2). At the time of this survey, most of the roads had been cleared for the neighborhood, so access to the northern portion of the tract easy.

The surveyed portion of the tract consists of a fairly flat flood plain which turns into a steep side slope to the west. The survey encountered an open pine and hardwood forest, with several areas of wetlands.

The tract, as previously mentioned, is intended to be used for construction of a neighborhood of single family homes. This work will require the construction of utilities, such as electrical lines and sewer, as well as an expanded road system when development begins. Construction will also involve activities associated with individual home sites. There will likely be increased short-term noise, traffic, and dust levels associated with the project. These activities have the potential to cause extensive damage to any archaeological resources which may be present on the tract.

This study, however, does not consider any future secondary impact of the project, including increased or expanded development of this portion of York County.

We were requested by Mr. Tom Smith of May Green Properties to provide a proposal for the survey on July 11, 2002. This proposal was accepted shortly thereafter and work began on July 17.

Initial background investigations incorporated a review of the site files at the South Carolina Institute of Archaeology and Anthropology by Chicora Foundation. As a result of that work, no sites were identified within the APE.

In addition, the South Carolina Department of Archives and History GIS was consulted to check for any NRHP buildings, districts, structures, sites, or objects in the study area. York County has received a comprehensive architectural survey (Kissane and Kissane 1992), so it is likely that these records are complete. No NRHP sites were found within 0.5 mile of the survey, but three previously recorded architectural sites were on the survey with two of the sites, 102-1368.00 (Mount Harmony Church) and 102-1368.01 (Mount Harmony Church Cemetery), were found in direct view of the survey tract. Both of these sites and 102-1367, a ca. 1908 house, have been determined not eligible for inclusion on the National Register of Historic Places.

Archival and historical research was limited to a review of secondary sources available in the Chicora Foundation files.

The archaeological survey was conducted on July 17 by Mr. Tom Covington and Ms. Nicole Southerland. The architectural survey of the project APE was conducted at the same time. Report production was conducted at Chicora's laboratories in Columbia, South Carolina from July 30-31, 2002.

This report details the investigation of the project area undertaken by Chicora Foundation and the results of that investigation.

CULTURAL RESOURCES SURVEY OF THE PATRICK PLACE TRACT

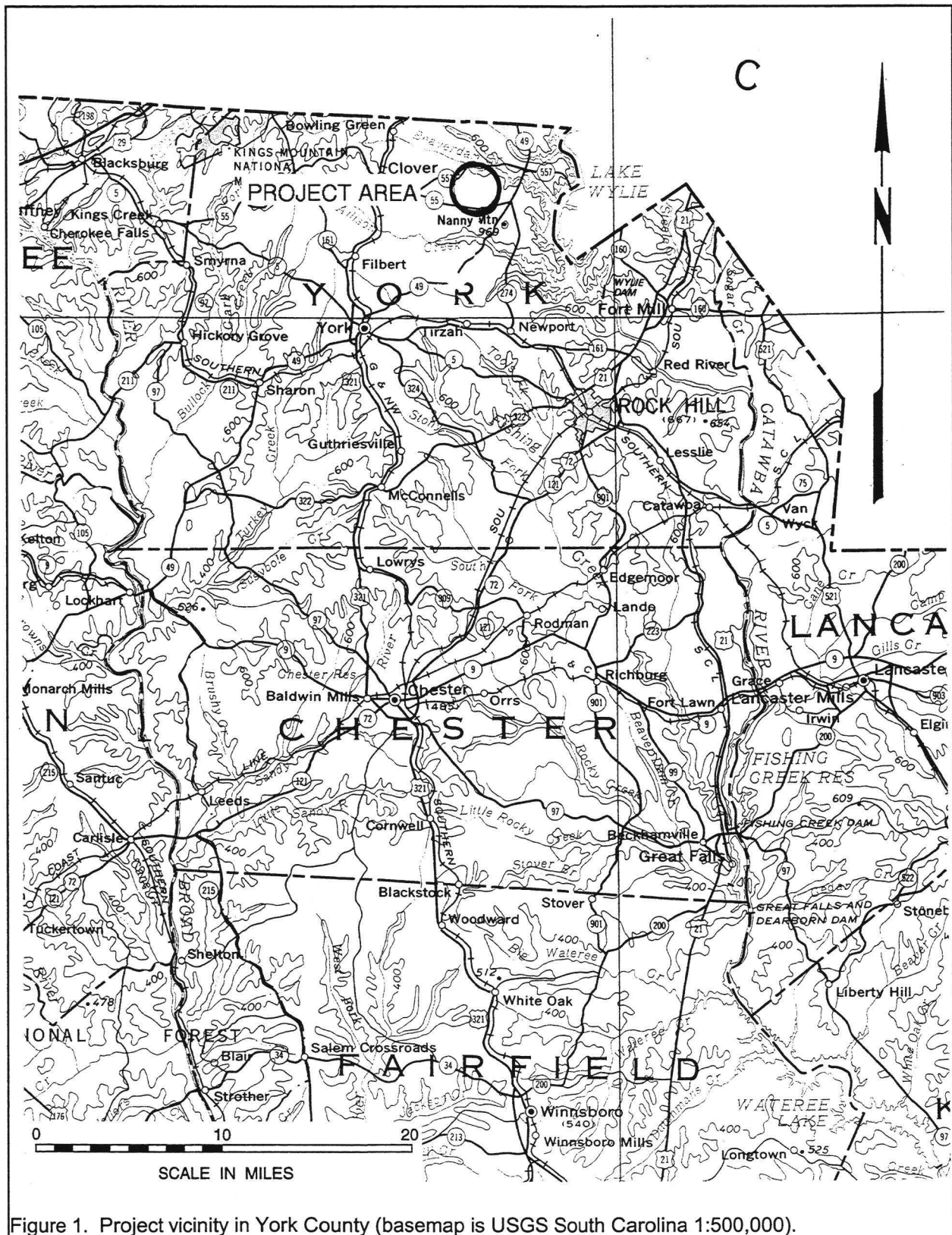


Figure 1. Project vicinity in York County (basemap is USGS South Carolina 1:500,000).

INTRODUCTION

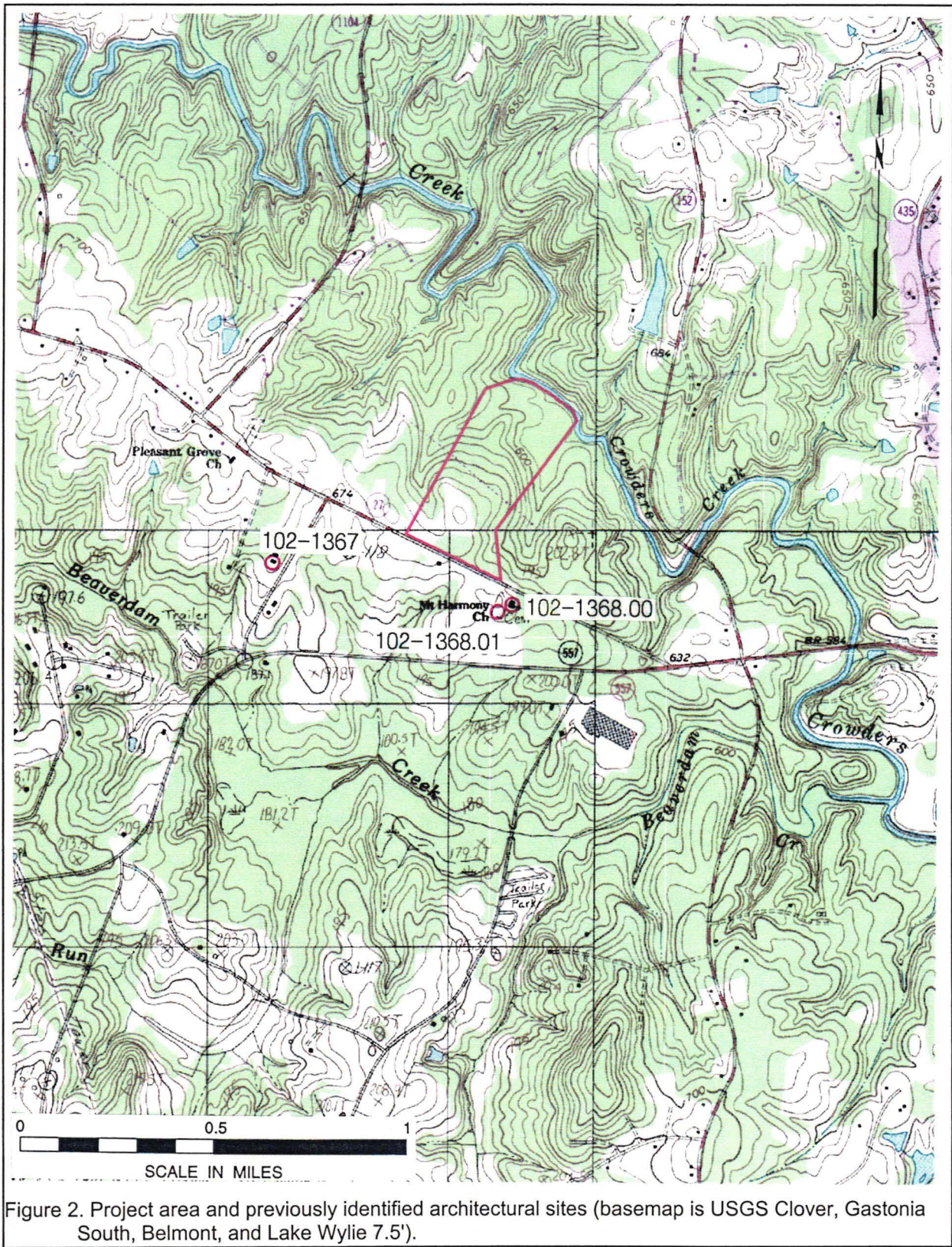


Figure 2. Project area and previously identified architectural sites (basemap is USGS Clover, Gastonia South, Belmont, and Lake Wylie 7.5').

NATURAL ENVIRONMENT

Physiographic Province

York County, forming part of South Carolina's north central boundary with North Carolina, is bordered to the east by Mecklenburg County and Lancaster County, to the south by Chester County, to the southwest by Union County, and to the west by Cherokee County.

The county is located within the Piedmont physiographic area and has a topography ranging from nearly level to steep (Camp 1965). Slopes can range from zero to 35% (Camp 1965). Slopes within the project area range from 2 to 25%.

The project area, as previously discussed is part of the Piedmont. Possibly part of the peneplain, the Piedmont is characterized by the dendritic stream patterns. It is also characterized by a range of metavolcanic, quartz, and quartzite materials used by Native Americans for stone tools. To the southeast of the county is the Coastal Plain, where the topography changes dramatically, the hilly upper Coastal Plain giving way to the broad expanses of relatively flat, level ground associated with the lower Coastal Plain. These areas provide sources for Coastal Plain cherts, also used extensively for tool manufacture.

In the survey area the

elevations range from about 590 to 690 feet above mean sea level (AMSL). The lowest areas slope down toward Crowders Creek, which provides the northern boundary of the tract.

Geology and Soils

Most of the rocks of the Piedmont are gneiss and schist, with some marble and quartzite (Hasseltun 1974). Some less intensively metamorphosed rocks, such as slate, occur along the eastern part of the province from southern Virginia into Georgia. This area, called the Slate Belt, is characterized by slightly lower ground with wider river valleys. Consequently, the Slate Belt has been favored for reservoir sites (Johnson 1970), as well as prehistoric occupation (see Coe 1964). In York County many of the Piedmont soils are weathered from argillites rich in silica and alumina. Other soils are formed in saprolite that weathered from crystalline rocks and "Carolina



Figure 3. View of Crowders Creek, the northern boundary of the tract.



Figure 4. View of wetlands found in the project area.

slates". Soils from the river floodplains formed in sediment that washed from the uplands of the Piedmont province.

The project crosses two different types of soils including Tatum silt loams which have a yellowish-brown (10YR5/8) silt loam to a depth of 0.4 foot over a red (2.5YR5/8) clay loam to a depth of 1.2 feet and a large area of mixed alluvial soils. The mixed alluvial soils are usually very deep and poorly drained to well drained. They are located by streams and are frequently flooded (Camp 1965).

Climate

Elevation, latitude, and distance from the coast work together to affect the climate of South Carolina, including the Piedmont. In addition, the more westerly mountains block or moderate many of the cold air masses that flow across the state from west to east. Even the very cold air masses which cross the mountains are warmed somewhat by compression before they descend on the Piedmont.

Consequently, the climate of York County is temperate. The winters are relatively mild and the summers warm and humid. Rainfall in the amount of about 46.7 inches is adequate, although less than in some neighboring counties.

Floristics

Piedmont forests generally belong to the Oak-Hickory Formation as established by Braun (1950). Regardless, the potential natural vegetation of the project area is the Oak-Hickory-Pine forest, composed of medium

tall to tall forests of broadleaf deciduous and needleleaf evergreen trees (Küchler 1964). The major components of this ecosystem include hickory, shortleaf pine, loblolly pine, white oak, and post oak.

Besides mixed pines and hardwoods, the survey area is also impacted by wetlands and Crowders Creek which flows beside the project site.

PREHISTORIC AND HISTORIC BACKGROUND

Previous Research

Relatively little research has been done in York County. Most of the work involves compliance surveys (Derting et al. 1991). Two surveys located near the current survey area both involve road improvement projects (Caballero 1987 and Moreland Altobelli and Associates, Inc. 2001).

Prehistoric Overview

Paleoindian Period

The Paleoindian Period, most commonly dated from about 12,000 to 10,000 B.P., is evidenced by basally thinned, side-notch projectile points; fluted, lanceolate projectile points, side scrapers, end scrapers; and drills (Coe 1964; Michie 1977; Williams 1965). Oliver (1981, 1985) has proposed to extend the Paleoindian dating in the North Carolina Piedmont to perhaps as early as 14,000 B.P., incorporating the Hardaway Side-Notched and Palmer Corner-Notched types, usually accepted as Early Archaic, as representatives of the terminal phase. This view, verbally suggested by Coe for a number of years, has considerable technological appeal.¹ Oliver suggests a continuity from the Hardaway Blade through the Hardaway-Dalton to the Hardaway Side-Notched, eventually to the Palmer Side-Notched (Oliver 1985:199-200). While convincingly argued, this approach is not universally accepted.

¹ While never discussed by Coe at length, he did observe that many of the Hardaway points, especially from the lowest contexts, had facial fluting or thinning which, "in cases where the side-notches or basal portions were missing, . . . could be mistaken for fluted points of the Paleo-Indian period" (Coe 1964:64). While not an especially strong statement, it does reveal the formation of the concept. Further insight is offered by Ward's (1983:63) all too brief comments on the more recent investigations at the Hardaway site (see also Daniel 1992).

The Paleoindian occupation, while widespread, does not appear to have been intensive. Artifacts are most frequently found along major river drainages, which Michie interprets to support the concept of an economy "oriented toward the exploitation of now extinct mega-fauna" (Michie 1977:124). Survey data for Paleoindian tools, most notably fluted points, is somewhat dated, but has been summarized by Charles and Michie (1992). They reveal a widespread distribution across the state (see also Anderson 1992b:Figure 5.1) with at least several concentrations relating to intensity of collector activity. What is clear is that points are found fairly far removed from the origin of the raw material. Charles and Michie suggest that this may "imply a geographically extensive settlement system" (Charles and Michie 1992:247).

Although data are sparse, one of the more attractive theories that explains the widespread distribution of Paleoindian sites is the model tracking the replacement of a high technology forager (or HTF) adaptation by a "progressively more generalized band/microband foraging adaption" accompanied by increasingly distinct regional traditions (perhaps reflecting movement either along or perhaps even between river drainages) (Anderson 1992b:46).

Distinctive projectile points include lanceolates such as Clovis, Dalton, perhaps the Hardaway, and Big Sandy (Coe 1964; Phelps 1983; Oliver 1985). A temporal sequence of Paleoindian projectile points was proposed by Williams (1965:24-51), but according to Phelps (1983:18) there is little stratigraphic or chronometric evidence for it. While this is certainly true, a number of authors, such as Anderson (1992a) and Oliver (1985) have assembled impressive data sets. We are inclined to believe that while often not conclusively proven by stratigraphic excavations (and such proof may be an unreasonable expectation), there is a large

CULTURAL RESOURCES SURVEY OF THE PATRICK PLACE TRACT

			Regional Phases		
Dates	Period	Sub-Period	COASTAL	MIDDLE SAVANNAH VALLEY	CENTRAL CAROLINA PIEDMONT
1715	HIST.	EARLY	Altamaha		Caraway
1650		LATE	Irene / Pee Dee	Rembert	
1100	MISS.	EARLY	Savannah	Hollywood	Dan River
		LATE	St. Catherines / Swift Creek	Lawton	Pee Dee
800	WOODLAND			Savannah	
A.D.			Wilmington	Sand Tempered Wilmington?	Uwharrie
B.C.		MIDDLE	Deptford	Deptford	Yadkin
300		EARLY			
1000			Refuge		Badin
2000	ARCHAIC	LATE		Thom's Creek Stallings	
3000				Savannah River Halifax	
5000		MIDDLE		Guilford Morrow Mountain Stanly	
8000	PALEOINDIAN	EARLY		Kirk	
10,000				Palmer	
				Hardaway	
				Hardaway - Dalton	
12,000			Cumberland	Clovis	Simpson

Figure 5. Generalized cultural sequence for South Carolina.

body of circumstantial evidence. The weight of this evidence tends to provide considerable support.

Unfortunately, relatively little is known about Paleoindian subsistence strategies, settlement systems, or social organization (see, however, Anderson 1992b for an excellent overview and synthesis of what is known). Generally, archaeologists agree that the Paleoindian groups were at a band level of

society, were nomadic, and were both hunters and foragers. While population density, based on isolated finds, is thought to have been low, Walthall suggests that toward the end of the period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980:30).

Archaic Period

The Archaic Period, which dates from 10,000 to 3,000 B.P.², does not form a sharp break with the Paleoindian Period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. Associated with this is a reliance on a broad spectrum of small mammals, although the white tailed deer was likely the most commonly exploited animal. Archaic period assemblages, exemplified by corner-notched and broad-stemmed projectile points, are fairly common, perhaps because the swamps and drainages offered especially attractive ecotones.

Many researchers have reported data suggestive of a noticeable population increase from the Paleoindian into the Early Archaic. This has tentatively been associated with a greater emphasis on foraging. Diagnostic Early Archaic artifacts include the Kirk Corner Notched point. As previously discussed, Palmer points may be included with either the Paleoindian or Archaic period, depending on theoretical perspective. As the climate became hotter and drier than the

previous Paleoindian period, resulting in vegetational changes, it also affected settlement patterning as evidenced by a long-term Kirk phase midden deposit at the Hardaway site (Coe 1964:60). This is believed to have been the result of a change in subsistence strategies.

Settlements during the Early Archaic suggest the presence of a few very large, and apparently intensively occupied, sites which can best be considered base camps. Hardaway might be one such site. In addition, there were numerous small sites which produce only a few artifacts — these are the "network of tracks" mentioned by Ward (1983:65). The base camps produce a wide range of artifact types and raw materials which has suggested to many researchers long-term, perhaps seasonal or multi-seasonal, occupation. In contrast, the smaller sites are thought of as special purpose or foraging sites (see Ward 1983:67).

Middle Archaic (8,000 to 6,000 B.P.) diagnostic artifacts include Morrow Mountain, Guilford, Stanly and Halifax projectile points. Much of our best information on the Middle Archaic comes from sites investigated west of the Appalachian Mountains, such as the work by Jeff Chapman and his students in the Little Tennessee River Valley (for a general overview see Chapman 1977, 1985a, 1985b). There is good evidence that Middle Archaic lithic technologies changed dramatically. End scrapers, at times associated with Paleoindian traditions, are discontinued, raw materials tend to reflect the greater use of locally available materials, and mortars are initially introduced. Associated with these technological changes there seem to also be some significant cultural modifications. Prepared burials begin to more commonly occur and storage pits are identified. The work at Middle Archaic river valley sites, with their evidence of a diverse floral and faunal subsistence base, seems to stand in stark contrast to Caldwell's Middle Archaic "Old Quartz Industry" of Georgia and the Carolinas, where axes, choppers, and ground and polished stone tools are very rare.

Among the most common of all Middle Woodland artifacts is the Morrow Mountain Stemmed projectile point. Originally divided into two varieties by Coe (1964:37,43) based primarily

² The terminal point for the Archaic is no clearer than that for the Paleoindian and many researchers suggest a terminal date of 4,000 B.P. rather than 3,000 B.P. There is also the question of whether ceramics, such as the fiber-tempered Stallings ware, will be included as Archaic, or will be included with the Woodland. Oliver, for example, argues that the inclusion of ceramics with Late Archaic attributes "complicates and confuses classification and interpretation needlessly" (Oliver 1981:20). He comments that according to the original definition of the Archaic, it "represents a preceramic horizon" and that "the presence of ceramics provides a convenient marker for separation of the Archaic and Woodland periods (Oliver 1981:21). Others would counter that such an approach ignores cultural continuity and forces an artificial, and perhaps unrealistic, separation. Sassaman and Anderson (1994:38-44), for example, include Stallings and Thom's Creek wares in their discussion of "Late Archaic Pottery." While this issue has been of considerable importance along the Carolina and Georgia coasts, it has never affected the Piedmont, which seems to have embraced pottery far later, well into the conventional Woodland period. The importance of the issue in the Sandhills, unfortunately, is not well known.

on the size of the blade and the stem. Morrow Mountain I points had relatively small triangular blades with short, pointed stems. Morrow Mountain II points had longer, narrower blades with long, tapered stems. Coe suggested a temporal sequence from Morrow Mountain I to Morrow Mountain II. While this has been rejected by some archaeologists, who suggest that the differences are entirely related to the life-stage of the point, the debate is far from settled and Coe has considerable support for his scenario.

The Morrow Mountain point is also important in our discussions since it represents a departure from the Carolina Stemmed Tradition. Coe has suggested that the groups responsible for the Middle Archaic Morrow Mountain (and the later Guilford points) were intrusive ("without any background" in Coe's words) into the North Carolina Piedmont, from the west, and were contemporaneous with the groups producing Stanly points (Coe 1964:122-123; see also Phelps 1983:23). Phelps, building on Coe, refers to the Morrow Mountain and Guilford as the "Western Intrusive horizon." Sassaman (1995) has recently proposed a scenario for the Morrow Mountain groups which would support this west-to-east time-transgressive process. Abbott and his colleagues, perhaps unaware of Sassaman's data, dismiss the concept, commenting that the shear distribution and number of these points "makes this position wholly untenable" (Abbott et al. 1995:9).

The controversy surrounding Morrow Mountain also includes its posited date range. Coe (1964:123) did not expect the Morrow Mountain to predate 6500 B.P., yet more recent research in Tennessee reveals a date range of about 7500 to 6500 B.P. Sassaman and Anderson (1994:24) observe that the South Carolina dates have never matched the antiquity of their more western counterparts and suggest continuation to perhaps as late as 5500 B.P. In fact they suggest that even later dates are possible since it can often be difficult to separate Morrow Mountain and Guilford points.

A recently defined point is the MALA. The term is an acronym standing for Middle Archaic and Late Archaic, the strata in which these points were first encountered at the Pen Point site

(38BR383) in Barnwell County, South Carolina (Sassaman 1985). These stemmed and notched lanceolate points were originally found in a context suggesting a single-episode event with variation not based on temporal variation. The original discussion was explicitly worded to avoid application of a typology, although as Sassaman and Anderson (1994:27) note, the "type" has spread into more common usage. There are possible connections with both the Halifax points of North Carolina and the Benton points of the middle Tennessee River valley, while the "heartland" for the MALA appears confined to the lower middle Coastal Plain of South Carolina.

The available information has resulted in a variety of competing settlement models. Some argue for increased sedentism and a reduction of mobility (see Goodyear et al. 1979:111). Ward argues that the most appropriate model is one which includes relatively stable and sedentary hunters and gatherers "primarily adapted to the varied and rich resource base offered by the major alluvial valleys" (Ward 1983:69). While he recognizes the presence of "inter-riverine" sites, he discounts explanations which focus on seasonal rounds, suggesting "alternative explanations . . . [including] a wide range of adaptive responses." Most importantly, he notes that:

the seasonal transhumance model and the sedentary model are opposite ends of a continuum, and in all likelihood variations on these two themes probably existed in different regions at different times throughout the Archaic period (Ward 1983:69).

Others suggest increased mobility during the Archaic (see Cable 1982). Sassaman (1983) has suggested that the Morrow Mountain phase people had a great deal of residential mobility, based on the variety of environmental zones they are found in and the lack of site diversity. The high level of mobility, coupled with the rapid replacement of these points, may help explain the seemingly large numbers of sites with Middle Archaic assemblages. Curiously, the later Guilford phase sites are not as widely distributed,

perhaps suggesting that only certain micro-environments were used (cf. Ward [1983:68-69] who would likely reject the notion that substantially different environmental zones are, in fact, represented).

Recently Abbott et al. argue for a combination of these models, noting that the almost certain increase in population levels probably resulted in a contraction of local territories. With small territories there would have been significantly greater pressure to successfully exploit the limited resources by more frequent movement of camps. They discount the idea that these territories could have been exploited from a single base camp without horticultural technology. Abbott and his colleagues conclude, "increased residential mobility under such conditions may in fact represent a common stage in the development of sedentism" (Abbott et al. 1995:9).

From excavations at a Sandhills site in Chesterfield County, South Carolina, Gunn and his colleague (Gunn and Wilson 1993) offer an alternative model for Middle Archaic settlement. He accepts that the uplands were desiccated from global warming, but rather than limiting occupation, this environmental change made the area more attractive for residential base camps. Gunn and Wilson suggest that the open, or fringe, habitat of the upland margins would have been attractive to a wide variety of plant and animal species.

The Late Archaic, usually dated from 6,000 to 3,000 or 4,000 B.P., is characterized by the appearance of large, square stemmed Savannah River projectile points (Coe 1964). These people continued to intensively exploit the uplands much like earlier Archaic groups with, the bulk of our data for this period coming from the Uwharrie region in North Carolina.

One of the more debated issues of the Late Archaic is the typology of the Savannah River Stemmed and its various diminutive forms. Oliver, refining Coe's (1964) original Savannah River Stemmed type and a small variant from Gaston (South 1959:153-157), developed a complete sequence of stemmed points that decrease uniformly in size through time (Oliver 1981, 1985). Specifically, he sees the progression from

Savannah River Stemmed to Small Savannah River Stemmed to Gypsy Stemmed to Swannanoa from about 5000 B.P. to about 1,500 B.P. He also notes that the latter two forms are associated with Woodland pottery.

This reconstruction is still debated with a number of archaeologists expressing concern with what they see as typological overlap and ambiguity. They point to a dearth of radiocarbon dates and good excavation contexts at the same time they express concern with the application of this typology outside the North Carolina Piedmont (see, for a synopsis, Sassaman and Anderson 1990:158-162, 1994:35).

In addition to the presence of Savannah River points, the Late Archaic also witnessed the introduction of steatite vessels (see Coe 1964:112-113; Sassaman 1993), polished and pecked stone artifacts, and grinding stones. Some also include the introduction of fiber-tempered pottery about 4000 B.P. in the Late Archaic (for a discussion see Sassaman and Anderson 1994:38-44). This innovation is of special importance along the Georgia and South Carolina coasts, but seems to have had only minimal impact in the uplands of South or North Carolina.

There is evidence that during the Late Archaic the climate began to approximate modern climatic conditions. Rainfall increased resulting in a more lush vegetation pattern. The pollen record indicates an increase in pine which reduced the oak-hickory nut masts which previously were so widespread. This change probably affected settlement patterning since nut masts were now more isolated and concentrated. From research in the Savannah River valley near Aiken, South Carolina, Sassaman has found considerable diversity in Late Archaic site types with sites occurring in virtually every upland environmental zone. He suggests that this more complex settlement pattern evolved from an increasingly complex socio-economic system. While it is unlikely that this model can be simply transferred to the Sandhills of South Carolina without an extensive review of site data and micro-environmental data, it does demonstrate one approach to understanding the transition from Archaic to Woodland.

Woodland Period

As previously discussed, there are those who see the Woodland beginning with the introduction of pottery. Under this scenario the Early Woodland may begin as early as 4,500 B.P. and continued to about 2,300 B.P. Diagnostics would include the small variety of the Late Archaic Savannah River Stemmed point (Oliver 1985) and pottery of the Stallings and Thoms Creek series. These sand tempered Thoms Creek wares are decorated using punctations, jab-and-drag, and incised designs (Trinkley 1976). Also potentially included are Refuge wares, also characterized by sandy paste, but often having only a plain or dentate-stamped surface (Waring 1968). Others would have the Woodland beginning about 3,000 B.P. and perhaps as late as 2,500 B.P. with the introduction of pottery which is cord-marked or fabric-impressed and suggestive of influences from northern cultures.

There remains, in South Carolina, considerable ambiguity regarding the pottery series found in the Sandhills and their association with coastal plain and piedmont types. The earliest pottery found at many sites may be called either Deptford or Yadkin, depending on the research or their inclination at any given moment.

The Deptford phase, which dates from 3050 to 1350 B.P., is best characterized by fine to coarse sandy paste pottery with a check stamped surface treatment. The Deptford settlement pattern involves both coastal and inland sites.

Inland sites such as 38AK228-W, 38LX5, 38RD60, and 38BM40 indicate the presence of an extensive Deptford occupation on the Fall Line and the Inner Coastal Plain/Sand Hills, although sandy, acidic soils preclude statements on the subsistence base (Anderson 1979; Ryan 1972; Trinkley 1980). These interior or upland Deptford sites, however, are strongly associated with the swamp terrace edge, and this environment is productive not only in nut masts, but also in large mammals such as deer. Perhaps the best data concerning Deptford "base camps" comes from the Lewis-West site (38AK228-W), where evidence of abundant food remains, storage pit features, elaborate material culture, mortuary behavior, and craft specialization has been

reported (Sassaman et al. 1990:96-98; see also Sassaman 1993 for similar data recovered from 38AK157).

Further to the north and west, in the Piedmont, the Early Woodland is marked by a pottery type defined by Coe (1964:27-29) as Badin.³ This pottery is identified as having very fine sand in the paste with an occasional pebble. Coe identified cord-marked, fabric-marked, net-impressed, and plain surface finishes. Beyond this pottery little is known about the makers of the Badin wares and relatively few of these sherds are reported from South Carolina sites.

Somewhat more information is available for the Middle Woodland, typically given the range of about 2,300 B.P. to 1,200 B.P. In the Piedmont and even into the Sand Hills, the dominant Middle Woodland ceramic type is typically identified as the Yadkin series. Characterized by a crushed quartz temper the pottery includes surface treatments of cord-marked, fabric-marked, and a very few linear check-stamped sherds (Coe 1964:30-32). It is regrettable that several of the seemingly "best" Yadkin sites, such as the Trestle site (31An19) explored by Peter Cooper (Ward 1983:72-73), have never been published.

Yadkin ceramics are associated with medium-sized triangular points, although Oliver (1981) suggests that a continuation of the Piedmont Stemmed Tradition to at least 1650 B.P. coexisted with this Triangular Tradition. The Yadkin in South Carolina has been best explored by research at 38SU83 in Sumter County (Blanton et al. 1986) and at 38FL249 in Florence County (Trinkley et al. 1993)

In some respects the Late Woodland (1,200 B.P. to 400 B.P.) may be characterized as a continuation of previous Middle Woodland cultural assemblages. While outside the Carolinas there were major cultural changes, such as the

³ The ceramics suggest clear regional differences during the Woodland which seem to only be magnified during the later phases. Ward (1983:71), for example, notes that there "marked distinctions" between the pottery from the Buggs Island and Gaston Reservoirs and that from the south-central Piedmont.

continued development and elaboration of agriculture, the Carolina groups settled into a lifeway not appreciably different from that observed for the previous 500-700 years. From the vantage point of the Middle Savannah Valley Sassaman and his colleagues note that, "the Late Woodland is difficult to delineate typologically from its antecedent or from the subsequent Mississippian period" (Sassaman et al. 1990:14). This situation would remain unchanged until the development of the South Appalachian Mississippian complex (see Ferguson 1971).

Historic Overview

York County, part of Anson County, North Carolina in 1750, was first settled by Scotch-Irish settlers who also inhabited the counties of Chester and Lancaster. In 1763, the lands of modern York County became Mecklenburg County, North Carolina, and finally Tryon County, North Carolina. It was in 1772 when the a boundary dispute between the Carolinas was settled and gave York County to South Carolina.

After the Revolution, agriculture remained as the predominant industry, although gold mining became an important industry during the nineteenth century. York County was ranked fourth in the production of gold in the state of South Carolina (Catawba Regional Planning Council 1975). By 1826, cotton was the principal crop grown in York County with other staples of wheat, corn, rye, and tobacco also bringing money into the economy (Mills 1826). It is also at this time that Mills (1826) reports that no other Indian settlements exist in the district except those on the Catawba River.

The nineteenth century in York County saw a significant population increase due to the black slaves used as labor for the rising cotton market (York County Census 1860). In 1860, almost half of the County's population was slave labor (York County Census 1860). The boom in York County's economy was no doubt due to the

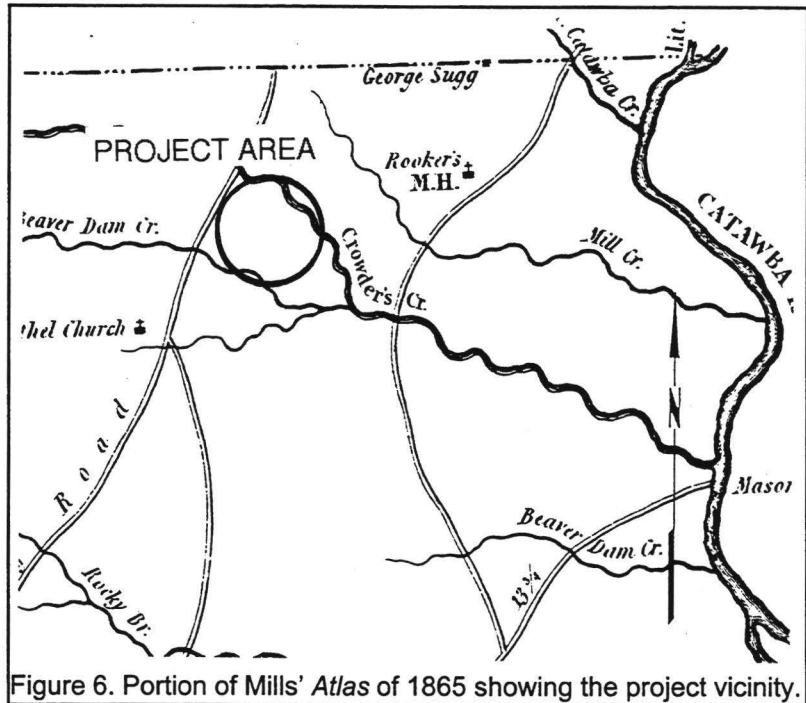


Figure 6. Portion of Mills' Atlas of 1865 showing the project vicinity.

establishment of roads and the arrival of the Charlotte and South Carolina Railroad in 1852. The line operated for ten years, bringing new goods and services to York County until it was destroyed during the Civil War (Rock Hill School District No. 3 1970).

Although only one battle, Nation Ford, was fought during the Civil War in York County, growth for the county decreased significantly. Reconstruction after the war forced many farmers to downsize their already small farms.

In 1880, the Rock Hill Cotton Factory was built to become the first steam-powered cotton factory in South Carolina. This led to an expansion of agriculture and industry and eventually led to the construction of other factories including the Anderson Automobile and the Fort Mill Manufacturing Company, which was the forerunner of Springs Industries.

York County's industry remained constant until the 1920s when the years of farming cotton began to erode the soil and destruction by the boll weevil further damaged cotton production. The Great Depression further pushed the County into stagnation.

York County became heavily dependent on industrial sites, including the Catawba Dam and Power Plant which eventually caused the establishment of the Duke Power Company which is still in use today (Kissane and Kissane 1992). A series of dams and hydroelectric facilities were constructed on the Catawba River in North and South Carolina which revitalized the economy once again.

By 1941, York County was one of the five most industrialized counties in South Carolina (Petty 1941). The 1950 *General Highway and Transportation Map of York County* does not show any structures within the project area, but almost every road surrounding the project area has structures showing the large population of the county (Figure 7). In the early 1980s, the county ranked thirty-second in South Carolina for cash receipts from agriculture (Petty 1941) and at this time several institutions of higher learning were established to further continue the increase in York County's economy.

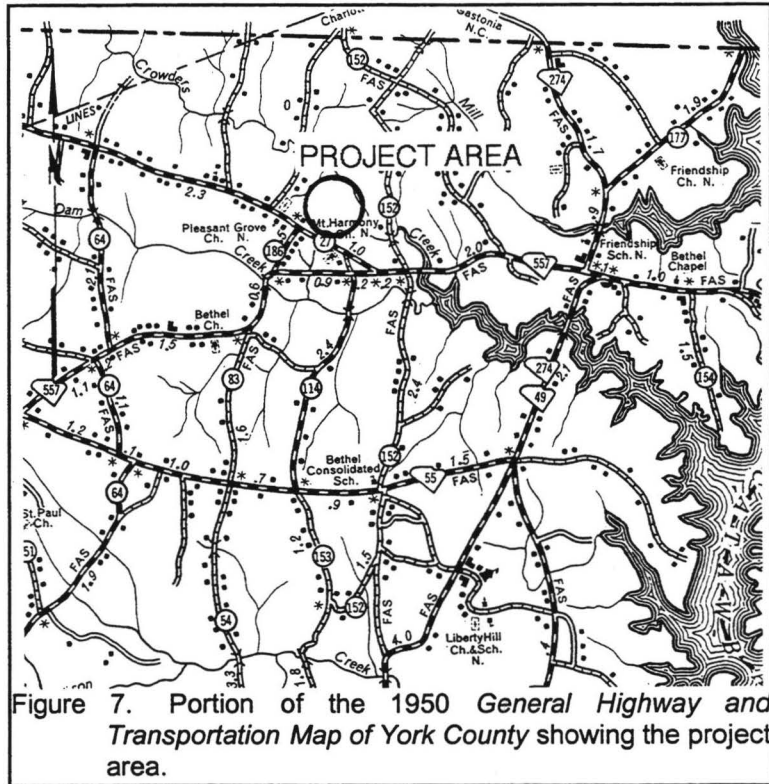


Figure 7. Portion of the 1950 *General Highway and Transportation Map of York County* showing the project area.

RESEARCH METHODS AND FINDINGS

Archaeological Field Methods and Findings

The initially proposed field techniques involved the placement of shovel tests at 100 foot intervals along transects placed at 100 foot intervals.

All soil would be screened through ¼-inch mesh, with each test numbered sequentially by transect. Each test would measure about 1 foot square and would normally be taken to a depth of at least 1 foot or until sterile subsoil was encountered. All cultural remains would be collected, except for mortar and brick, which would be quantitatively noted in the field and discarded. Notes would be maintained for profiles at any sites encountered. A total number of 81 shovel tests were excavated along 12 transects.

Should sites (defined by the presence of two or more artifacts from either surface survey or shovel tests within a 50 foot area) be identified, further tests would be used to obtain data on site boundaries, artifact quantity and diversity, site integrity, and temporal affiliation. These tests would be placed at 25 to 50 feet intervals in a simple cruciform pattern until two consecutive negative shovel tests were encountered. The information required for completion of South Carolina Institute of Archaeology and Anthropology site forms would be collected and photographs would be taken, if warranted in the opinion of the field investigators.

These proposed techniques were implemented with no significant modifications. A series of 12 transects were established running primarily southeast to northwest along Crowders Creek. Individual shovel tests were numbered to the south along these transects. The survey area was covered in a mixed pine and hardwood forest, with little ground visibility. The topography in this area was steep to the northwest with no distinct ridge tops and extensive soil disturbance. Throughout the shovel tests revealed mostly

mixed alluvial soils caused by the flooding of Crowders Creek.

Sites would be evaluated for further work based on the eligibility criteria for the National Register of Historic Places. Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the lead agency in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and History.

Analysis of collections would follow professionally accepted standards with a level of intensity suitable to the quantity and quality of the remains.

Nevertheless, the archaeological survey of the project area failed to identify any archaeological remains. This is most likely to the frequently flooded soils and lack of any dry, level ground.

Architectural Survey

As previously discussed, we elected to use a 0.5 mile area of potential effect (APE). The architectural survey would record buildings, sites, structures, and objects which appeared to have been constructed before 1950 and which retained their integrity. Those which have undergone such extensive modifications to preclude their eligibility were not recorded.

For each identified resource an architectural survey form would be completed and at least two representative photographs would be taken. Permanent control numbers would be assigned by the S.C. Department of Archives and History at the conclusion of the study. The site forms for the resources identified during this study would then be submitted to the South Carolina State Historic Preservation Office.

CULTURAL RESOURCES SURVEY OF THE PATRICK PLACE TRACT

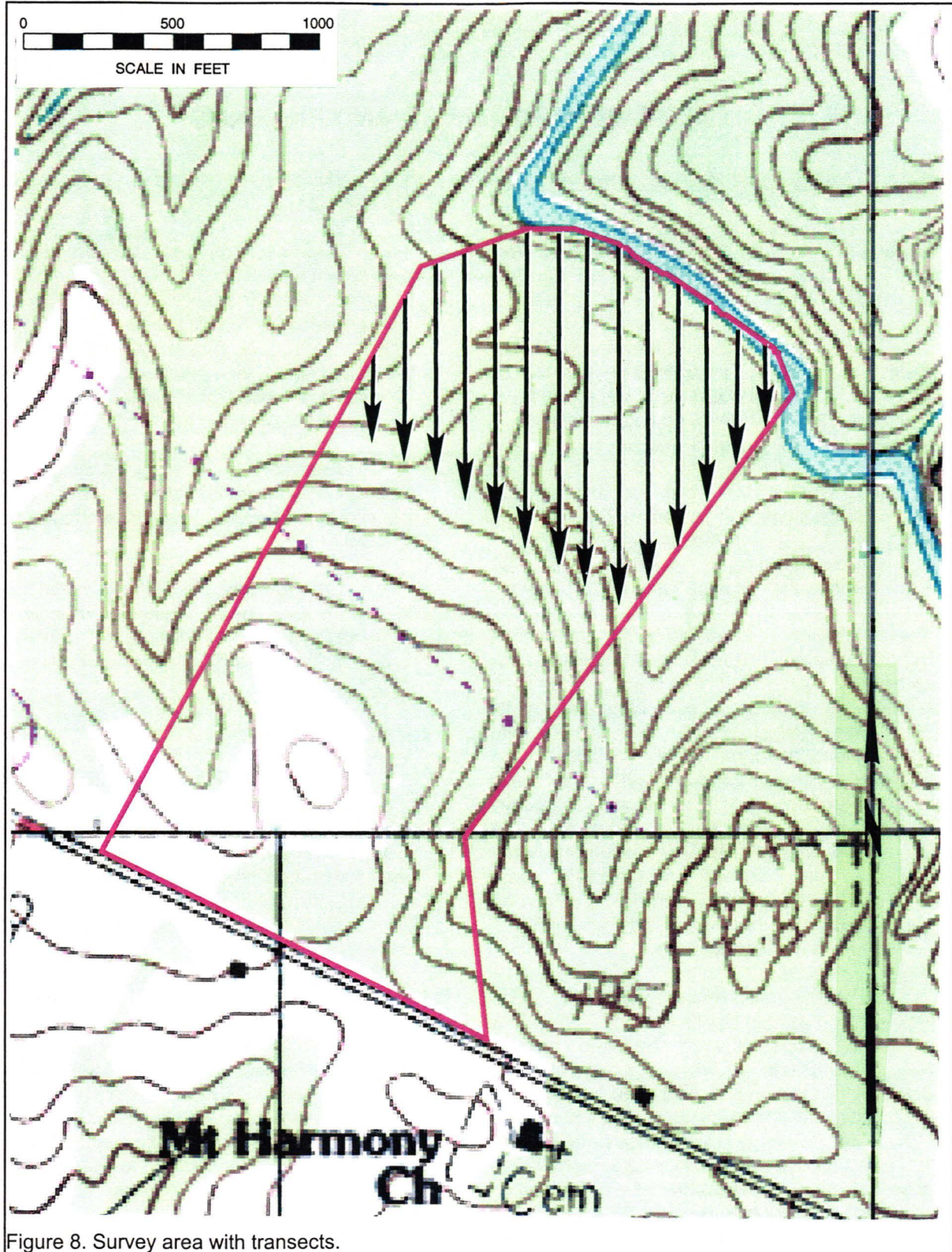


Figure 8. Survey area with transects.

Site Evaluation and Findings

Archaeological sites will be evaluated for further work based on the eligibility criteria for the National Register of Historic Places. Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the lead federal agency, in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and History.

The criteria for eligibility to the National Register of Historic Places is described by 36CFR60.4, which states:

the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and

a. that are associated with events that have made a significant contribution to the broad patterns of our history; or

b. that are associated with the lives of persons significant in our past; or

c. that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent

a significant and distinguishable entity whose components may lack individual distinction; or

d. that have yielded, or may be likely to yield, information important in prehistory or history.

National Register Bulletin 36 (Townsend et al. 1993) provides an evaluative process that contains five steps for forming a clearly defined explicit rationale for either the site's eligibility or lack of eligibility. Briefly, these steps are:

- identification of the site's data sets or categories of archaeological information such as ceramics, lithics, subsistence remains, architectural remains, or sub-surface features;

- identification of the historic context applicable to the site, providing a framework for the evaluative process;



Figure 9. Mount Harmony Church (102-1368.00) looking south.

- identification of the important research questions the site might be able to address, given the data sets and the context;
- evaluation of the site's archaeological integrity to ensure that the data sets were sufficiently well preserved to address the research questions; and
- identification of important research questions among all of those which might be asked and answered at the site.

This approach, of course, has been developed for use documenting eligibility of sites being actually nominated to the National Register of Historic Places where the evaluative process must stand alone, with relatively little reference to other documentation and where typically only one site is being considered. As a result, some aspects of the evaluative process have been summarized, but we have tried to focus on each archaeological site's ability to address significant research topics within the context of its available data sets.

The survey failed to identify any additional structures that were in the APE which contain enough integrity to be eligible for the National Register of Historic Places. The two architectural sites within view of the survey area, 102-1368.00 (Mount Harmony Church) and 102-1368.01 (Mount Harmony Church Cemetery), will only experience secondary impacts such as increased traffic and noise levels until the construction is finished. We concur with the determination of ineligibility.

CONCLUSIONS

This study involved the examination of a portion of a 60 acre tract situated in central York County, South Carolina. The tract is proposed for the construction of single family dwellings. This report, conducted for May Green Properties, provides the results of that investigation and is intended to assist that organization comply with their historic preservation responsibilities.

The survey area consists of areas of pines, hardwoods, and wetlands. The archaeological survey, which included close interval shovel testing, conducted at 100-foot intervals, revealed mostly alluvial soils, and failed to uncover any archaeological sites.

The surrounding areas are still fairly rural with several small non-historic houses near the project area. Nevertheless, an APE 0.5 mile around the project area was examined, but no historic structures were identified which are intact and which appear to be potentially eligible for

inclusion on the National Register of Historic Places. A comprehensive survey has been conducted for York County (Kissane and Kissane 1992), but no the only structures located near the survey tract have been determined not eligible for inclusion on the National Register of Historic Places.

It is possible that archaeological remains may be encountered in the area during construction. As always, the utility's contractors should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office, or Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No further land altering activities should take place in the vicinity of these discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

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